

SECTION

8

**Project Development,
Environmental Analysis,
Land Acquisition,
Construction Documents
and Permits**

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Project Development

All projects receiving federal aid must comply with laws designed to protect human, environmental and cultural resources. The following simplified overview, based on Federal Highway Administration guidance, describes the process that must follow completion of the Master Plan in concurrent and chronological order:

1. Identify Project Manager

The Cities of La Vergne and Smyrna should each identify an individual to work directly on the implementation process. Many communities assign this responsibility to an existing staff person such as a City Engineer or Parks Department Director. Other communities choose to hire a professional consultant to assist with the process. The designated Project Manager will coordinate with the design consultants, public agencies and trail proponents on matters related to compliance and construction.

2. Secure Environmental Clearance

More detailed information related to Environmental Assessments is provided in the next section of this document. In brief terms, this federally assisted project may be subject to a variety of environmental reviews. The level of requisite review will differ from one trail segment to another depending on the potential environmental impacts of each. The project sponsor is generally responsible for initiating the reviews and supplying information to appropriate agencies. However, most communities rely on the assistance of an experienced professional consultant (typically the firm chosen to produce construction drawings and specifications) in conducting research, field studies and preparing agency submittals. Although a number of local, state and federal agencies may review the submittals, final environmental clearance is the responsibility of the Tennessee Department of Transportation.

The process required to complete the Environmental Assessment generally requires modifications and revisions to the conceptual level Master Plan. As environmental or other concerns are identified, the trail alignment may be shifted or realigned entirely to avoid negative environmental or other impacts. Depending on the significance of identified impacts, it may even be necessary to hold additional public meetings to ensure that the final design complies with state and federal codes. In any event, it must be stressed that design development and the Environmental Assessment are concurrent steps and that continued modifications to the Master Plan should be expected.

3. Obtain Clearance of Rights-of-Way (ROW)

As a federally assisted project, the La Vergne/Smyrna greenways must provide public access and sponsors must hold the right to the real estate for the project by deed, lease, easement, license or resolution. The right-of-way process may include the purchase of land or right-of-way and utility clearance. If an outright purchase is required, the project sponsor must not make an offer to the property owner until Environmental Clearance is provided by TDOT and a federal appraisal is conducted—all property acquisition must conform with the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

4. Submit Documentation

All project documentation, including the Environmental Clearance, Clearance of Rights-of-Way, construction drawings and specifications, opinions of probable construction cost, permits and bid documents, must be assembled and reviewed by TDOT's Transportation Enhancement Coordinator prior to advertising the project for bid and award of contract.

5. Advertise for Bids

The project owner or sponsor will advertise the trail project for bid. The bid announcement identifies when and where sealed bids will be received and describes the project in general terms. It also states where plans and specifications are available. Additionally, the announcement should identify the date and location of a pre-bid meeting where contractors will be able to ask questions of the project sponsor and design consultants.

6. Select Contractor

The bids are prepared by contractors on forms included in the construction specifications and are accompanied by a bid bond, properly executed, or a certified or cashier's check equal to 5% of the total bid price. The contractor must also provide his or her license number and its expiration date. The contract is typically awarded to the lowest qualified bidder.

7. Submit Invoices for Reimbursement

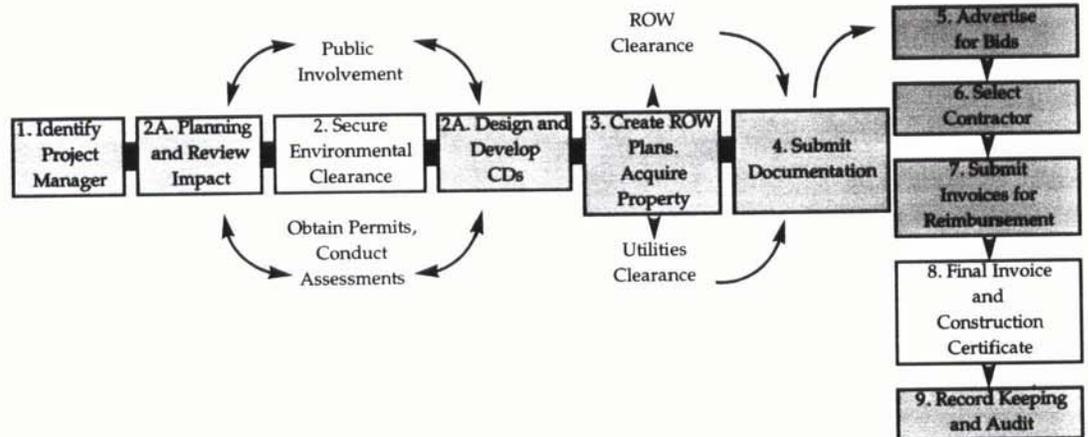
During all phases of the project, the owner must keep detailed records in order to request reimbursement from the Tennessee Department of Transportation. Typically, as contractors complete work and submit bills, TDOT reimburses at the percentage stated in the agreement between the agency and the sponsor.

8. Final Invoice and Construction Certificate

The last invoice and submittal to TDOT should include a certification to verify that the project has been constructed as designed and approved according to state and federal guidelines and requirements. The certification should follow construction but occur prior to the processing of final invoices.

9. Record Keeping and Audit

Audit requirements generally depend on the total federal funding. However, it is critical that accurate records be kept of all expenses and construction issues.



Environmental Assessment

The objective of the Environmental Assessment (EA) is to accumulate data to evaluate potential environmental impacts of the proposed trail segment. The assessment consists primarily of record reviews, interviews and physical site inspections to identify impacts and to record site information.

In the case of the La Vergne and Smyrna greenways, the EA must be developed after completion and approval of greenway master plans and prior to property acquisition and construction. Upon clearance of the EA and resulting categorical exclusion by the Tennessee Department of Transportation, procedures related to property acquisition can begin, along with the development of construction drawings and specifications.

It must be stressed that although funding for initial phases of this project will be financed primarily through a direct federal appropriation, the funding will be administered by TDOT and will be subject to TEA-21 funding standards. Therefore, the EA must conform to the criteria established by TDOT for projects funded through TEA-21:

1. Section 4(f) of the Department of Transportation Act of 1966

"It is hereby declared to be the national policy that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

If trail segments traverse public park and recreation lands, the EA must include a letter from the owner (signed by the Parks and Recreation Department Director or other authorized individual). The letter should include a description of the project, description of project funding and description of the public park or recreation land that the trail will traverse. The letter should state that the project is acceptable and consistent with the designated use of the park, and that the location and design will be accomplished in a manner that will not cause harm to the park. The submittal must include requisite maps and plans that illustrate the location of the park and proposed trail(s). This letter should be addressed to:

The Tennessee Department of Transportation
James K. Polk Building, Suite 600
Nashville, TN 37243-0341

2. Section 106 of the National Historic Preservation Act of 1966

"The head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register."

In order to comply with Section 106, the Tennessee State Historic Preservation Office (SHPO) must review the project. Therefore, the owner or the owner's representative must submit a scoping letter to the SHPO that includes a description of the project and project funding. The submittal must include requisite maps and plans that illustrate the project location. Additionally, the SHPO expects the EA submittal to include a USGS 7.5-minute series map (photocopy) of the area with the trail routing indicated, along with numbered photographs of the project site-the photographs should be keyed to the project map. If any structures fall within or adjacent to the trail alignment, photographs of the structures should be included, along with available information such as the date of construction and known historic and cultural relevance. This information is submitted to:

Mr. Herb Harper
Tennessee Historical Commission
Clover Bottom Mansion
2941 Lebanon Road
Nashville, TN 37243

3. Endangered Species Act of 1973 and Fish and Wildlife Coordination Act of 1958

The purpose of the Endangered Species Act is to "... provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species . . ." The Fish and Wildlife Coordination Act "... ensures that wildlife conservation receives equal consideration and is coordinated with other features of water resource development programs. Whenever reclamation proposes to alter or modify any body of water for any purpose, reclamation must first consult and coordinate its actions and projects with the U.S. Fish and Wildlife Service (FWS) and the affected state fish and game agency. This consultation and coordination will address ways to conserve wildlife resources by preventing loss of and damage to such resources, as well as to further develop and improve these resources."

Necessary coordination for compliance with the Endangered Species Act and the Fish and Wildlife Coordination Act consists of a submittal to the U.S. Fish and Wildlife Service. The project owner, or owner's representative, must forward a scoping letter to the Service including a description of the project and project funding. The submittal must also include a USGS 7.5-minute series map (photocopy) of the area with the trail routing indicated, along with a request for endangered species information. This packet is addressed to:

Dr. Lee A. Barclay
U.S. Department of the Interior
Fish and Wildlife Service
446 Neal Street
Cookeville, Tennessee 38501

A copy of the information prepared for the Fish and Wildlife Service should also be submitted to:

Mr. Reggie Reeves
Director, Division of Natural Heritage
Tennessee Department of Environment and Conservation
14th Floor, L&C Tower
491 Church Street
Nashville, TN 37243-0447

4. Executive Order 11988 - Floodplain Management

"Each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains in carrying out its responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; (2) providing Federally undertaken, financed or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities."

The floodplain is the land adjacent to a river, lake, stream or creek that is subject to flooding. Floodplains are designated by the frequency of the flood that is large enough to inundate them. For example, a 100-year flood, that having a one percent likelihood of occurring in any given year, will inundate or cover the 100-year floodplain. The National Flood Insurance Program establishes minimum standards of protection against various floods, particularly the 100-year flood. However, these standards apply primarily to the construction of buildings and structures and not to recreational activities. In fact, communities should consider acquiring properties in order to turn the most vulnerable part of the floodplains into greenways or parks with facilities such as trails that are not really subject to flood damage. Greenway amenities such as restrooms or other structures subject to flood damage should not be located in areas susceptible to flooding. The owner, or owner's representative, should examine Federal Emergency Management Agency (FEMA) flood maps for specific trail segments as individual trail segments are chosen for implementation. The procedure to comply with this Executive Order is the same as that listed below for Executive Order 11990 - Protection of Wetlands.

Executive Order 11990 - Protection of Wetlands

"Each agency shall provide leadership and shall take action to prevent the destruction, loss or degradation of wetlands, and to preserve and enhance natural and beneficial values of wetlands in carrying out the agency's responsibilities (1) acquiring, managing, and disposing of Federal lands and facilities; and (2) providing Federally undertaken, financed, or assisted construction and improvement; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities."

In order to comply with Executive Orders 11988 and 11990, the owner, or owner's representative, along with a qualified biologist, must conduct an inspection of the project site. The biologist must then prepare a letter identifying the major jurisdictional waters (streams and wetlands) associated with construction of the greenway. The letter should also state that a U.S. Army Corps of Engineers permit and a Tennessee Department of Environment and Conservation Aquatic Resource Alteration Permit (ARAP) will be secured for each location where the greenway crosses a creek. If appropriate, the letter should also state that, based on the types of crossings and the proposed construction techniques, the permits will fall under the Corps' Nationwide Permits (NWP) and the Department's general ARAP permits. Relevant to Executive Order 11990, the letter must also state that no jurisdictional wetlands were found that would be impacted by construction of the greenway. The biologist's letter is included in the EA submittal to the TDOT.

5. Air and Noise Evaluation

It is extremely unlikely that a trail or greenway project would cause air or noise pollution beyond the initial construction phase-those impacts should be mitigated by the application of Best Management Practices for construction. Therefore, unless otherwise indicated, the final EA submittal to the TDOT should include a statement to the effect that no increase in noise levels or air quality impacts to sensitive receptors is anticipated as a result of this project.

6. Hazardous Waste Evaluation

At this project level, an Environmental Assessment related to hazardous, toxic and radiological waste consists chiefly of on-site investigations and review of maps and historic aerial photographs. The purpose of the investigations and review is to identify potential dumps or landfills, contamination or spills, underground storage tanks, and other visible environmental concerns.

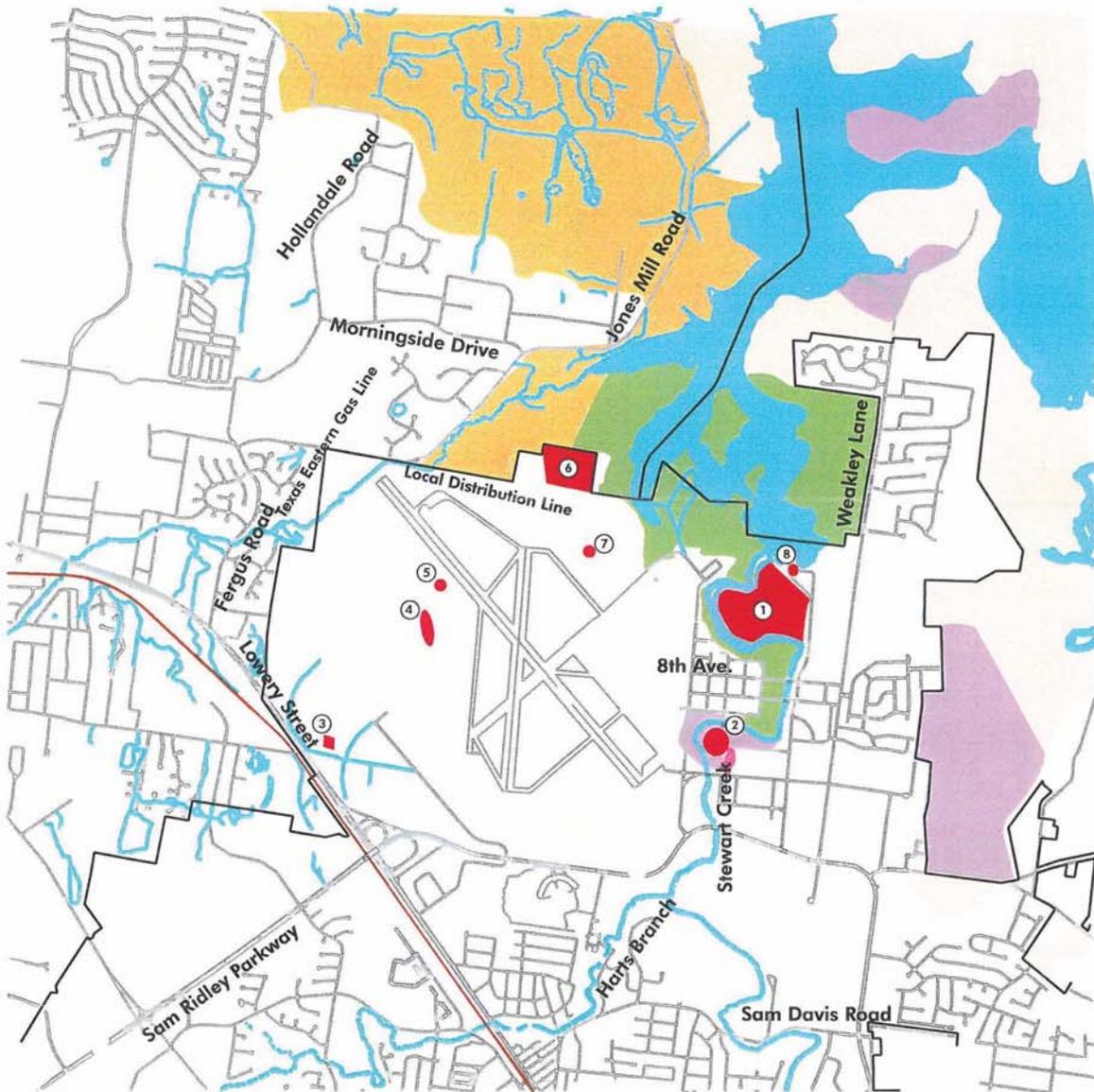
Assuming that the EA does not reveal hazardous waste, the final EA submittal to the TDOT should include a statement to the effect that no hazardous waste sites are known to be located in the project vicinity. However, the EA should also state that if hazardous substances/wastes are encountered within the proposed project area, their disposition will be subject to the applicable sections of the Federal Resource Conservation and Recovery Act, as amended; the Comprehensive Environmental Response, Compensation, and Liability Act, as amended; and the Tennessee Hazardous Waste Management Act of 1983.

In April, 2000, after review of the Greenway Master Plan, the Corps of Engineers identified several sites within the study area that they are currently reviewing for hazardous waste. It must be stressed that the review of these sites is not complete and that further coordination with the Corps will be required to monitor the progress of the agency's findings and to develop appropriate mitigation measures related to the greenway. However, the following sites were identified and are illustrated on the map on the following page; descriptions of the sites were provided by the Nashville District. see figure 8.1

1. STP Landfill. Landfilling operations first began in this AOC in 1943 and continued until at least 1968. The landfill received all solid waste from the base that was not recycled. The landfill also probably received the ash from the incinerator and sludge from the sewage treatment plant. A portion of the AOC was also used as a skeet range for less than ten years. Possible contaminants associated with the use of the landfill include heavy metals from the incinerator and sewage treatment plant; lead from the skeet range; organic compounds such as dioxins and polycyclic aromatic hydrocarbons (PAHs) as products of combustion from the incinerator. The landfill may also have received waste solvents, pesticides, and possibly waste chemical warfare training agents.
2. MID Landfill. There was no evidence of any landfill operations occurring at this AOC discovered during the archive search. There was no activity observed in this AOC on any of the aerial photographs reviewed.
3. Small Arms Range. The small arms range was located near the intersection of the Perimeter Road and Murfreesboro Road in the southwestern portion of the air field. The small arms range was probably used from 1942 to the close of the base in 1970. This range is a probable source of heavy metal contamination such as lead and copper.

Hazardous Waste Evaluation Map La Vergne - Smyrna Greenway

- Tennessee Army National Guard
- TWRA WMA Unit I
(Continue access to existing trails)
- TWRA WMA Unit II
(Continue access to existing trails)
- Safety Zone (Recreation Areas)
- Private Development Areas



- LEGEND**
1. STP Landfill
 2. MID Landfill
 3. Small Arms Range
 4. Ordinance Area
 5. Ordinance Burning Ground
 6. Airport Landfill
 7. Firefighter Training Area
 8. Incinerator



Figure 8.1

4. Ordnance Area. The ordnance area contained seven buildings including a chemical storage building, pyrotechnic storage building and two Igloo bunkers. There were no records obtained during the archive search relating to the types or amount of ordnance stored at the former SAFB. There was no information obtained on the types of chemicals stored in the chemical storage building. Since the chemical storage building was in the ordnance area, it could have been used to store chemical weapons, or it could have been used to store conventional chemicals such as solvents.

5. Ordnance Burning Ground. The ordnance burning ground was located approximately 600 feet north of the ordnance area. Based upon aerial photographs, the burning ground was most active from 1963 through 1968. The burning of explosives and ordnance are a possible source of soil contamination from metals and explosive residues.

6. Airport Landfill. The airport landfill does not appear to have been used by the airbase until at least after 1968. An aerial photograph dated September 10, 1968 associated with the Declaration of Excess indicates no disturbed soil or disturbed vegetation in AOC-1.

7. Firefighter Training Area. The firefighter training area was used from approximately 1950 to 1968, with heavy use around 1963. Firefighter training was documented to have taken place as early as 1942, but the location of the training was not verified. Gasoline and oil fires were used for training.

8. Incinerator. The incinerator was located in the northern portion of the STP landfill. It was built in 1942 and apparently operated during the life of the air base. The solid waste from the incinerator was apparently placed into the STP landfill. The ash from the incinerator could be a source of contamination such as heavy metals and by products of burning (pyrolysis) such as polyaromatic hydrocarbons and dioxins.

The final TDOT submittal consists of copies of the scoping letters described above, along with copies of the responses received from each agency or individual. The submittal should also include the relevant maps and illustrations that accompanied the scoping letters. Assuming that all agency responses are favorable, a cover letter prepared by the owner or owner's representative should address the following:

- Project Purpose
Typically recreational and/or alternative transportation
- Project Description
Include trail construction details and section
- Relocation Impacts
Unless research and investigation have indicated otherwise, state that this project will not involve relocation impacts
- Section 4(f) of the Department of Transportation Act of 1966

Provide the name and location of the park where the trail will be located, along with a statement that Section 4(f) provisions are not invoked in these areas, since there is not a change in the use of the land from 4(f) protected. Additionally, state that the trail will be under the jurisdiction of the local Parks and Recreation Department and that the trail will not be incorporated into a transportation facility, but will continue to function as part of the parkland. Also state that the land needed is not a 4(f) use because it is solely for the enhancement of the park facility. Attach a copy of the Department Director's letter of approval.

- Section 106 of the National Historic Preservation Act of 1966
State that the Tennessee Historical Commission reviewed the project area and that the Commission had no objection to proceeding with the project. Attach a copy of the State Historic Preservation Officer's response to the scoping letter.
- Endangered Species Act of 1973 and Fish and Wildlife Coordination Act of 1958
State that the U.S. Fish and Wildlife Service has reviewed the project and that they determined that no significant impacts to wetlands or federally listed endangered or threatened species are anticipated from the project. Also state that no channel modifications will be required by the project, and that strict adherence to TDEC's Standard Specifications for Soil Erosion and Sediment Control will minimize impact to streams. Attach a copy of the Service's response to the scoping letter.
- Executive Order 11988 - Floodplain Management
Refer to the biologist who reviewed the project site, and state that his or her inspection revealed that the project is not expected to significantly encroach upon the 100-year flood plain. Also state that, should it do so, hydrological impacts would be expected to be minor, because the trail construction will be primarily at grade and not require significant fill within the 100-year flood plain. Attach a copy of the biologist's letter.
- Executive Order 11990 - Protection of Wetlands
Again, refer to the biologist who reviewed the project site and state that his or her inspection found no jurisdictional wetlands that would be impacted by construction of the trail. Cite the attached copy of the biologist's letter.
- Air and Noise Evaluation
State that no increase in noise levels or air quality impacts are anticipated
- Hazardous Waste Evaluation
State that no hazardous waste sites are known to be located in the project vicinity

Assuming that the processes required for the EA do not identify concerns, close the cover letter with a statement to the effect that the project, as proposed, will not involve significant impacts to planned growth, land use, or existing travel patterns. Also state that the findings of the review process demonstrate the fact that the proposed greenway project will not individually or cumulatively have any significant environmental impacts. Submit the EA to:

Mr. Charles Bush
State of Tennessee, Department of Transportation
Suite 900, James K. Polk Building
Nashville, Tennessee 37243-0341

Land Acquisition

Land and land ownership are primary issues related to greenway development. As mentioned previously in this document, all right-of-way and/or land acquisition must conform to the Uniform Relocation Assistance and Real Property Acquisition Policies Act. The Act provides for uniform and equitable treatment of persons displaced from their homes, businesses, or farms by federal and federally assisted programs and establishes uniform and equitable land acquisition policies for federal and federally-listed programs. Whenever acquiring real property for a program or project by a federal agency results in displacing anyone, the agency shall reimburse and provide relocation planning, assistance, coordination, and advisory services.

It should be stressed that outright purchase of land is not the only option for securing the right to public access along the greenway corridor. The Conservation Fund, a national nonprofit land and water conservation organization, has identified three primary methods for securing properties for public use and greenway development:⁵⁶

1. Agreements

Temporary binding agreements are typically employed for the short-term purpose of acquiring land as more permanent ownership options are developed. Temporary agreements fall into the following categories:

- Management agreements established between property owners and greenway organizations clarify ownership responsibilities, such as who will manage the property during the terms of the agreement and what that management will require. Agreements of this nature are considered appropriate when landowners are willing and active participants in the use of the property for greenway purposes.
- Formal land leases allow a greenway organization to control access to a property and ongoing activities such as forestry or mining while making improvements related to the safety of greenway users. As the lessee, the greenway organization typically pays rent to the landowner for the duration of the land lease.
- Long-term leases or permits can be granted for as long as 99 years or more. These leases are frequently established for a nominal fee (typically \$1) and outline responsibilities of the lessee, such as liability protection. When government agencies are involved in this type of agreement, a permit can be granted to have a trail or greenway cross a piece of property-coordination with state highway departments is typically accomplished through this type of permit.

⁵⁶Loring LaB. Schwarz, Editor. *Greenways: A Guide to Planning, Design, and Development*. (Washington, D.C., Island Press, 1993) 102

2. Easements

"An easement is a mutually binding legal contract between a landowner and an individual or organization who has requested a special interest or right in the land."⁵⁷ Easements usually define boundaries, uses and management obligations and offer flexibility to both the landowner and the easement holder.

The Conservation Fund suggests that two types of easements be considered: affirmative easements and negative easements. An affirmative easement allows the easement holder the right to access and use the land at any time. This type of easement also allows the holder to erect structures or make other improvements, such as utility installations. A negative easement allows the restriction of land use on a subject property, but does not allow the easement holder to access or use the land or to make improvements. An example of a negative easement is a scenic easement that restricts the removal of vegetation or other landform alterations.

Grants, reservations and dedications are used to create easements. An easement based on a grant transfers the landowner's rights to the easement holder through a legal procedure and is the most common easement type. Reservation easements allow a landowner to attach specific language to a property deed in order to provide for certain rights or interests in the subject property. Dedicated easements occur only when a landowner conveys property rights to a public agency and that agency agrees to accept associated responsibilities. Easements, regardless of the type, generally reduce the owner's property tax as part of the land transaction.

Specific types of easements typically used to secure greenway lands include:

- A right of public access easement provides the public the legal right to access and use a specific parcel of land for defined purposes such as walking, jogging or bicycling. Other activities, such as hunting or motorized vehicle use, are restricted.
- A conservation easement defines physical limits on use and development of the land in order to protect its natural resources while allowing the owner to continue to use the land.
- A preservation easement protects the historical integrity of buildings or landscape elements by establishing guidelines that must be adhered to when making improvements to the property.
- A joint-use easement defines the legal rights of the owner and lessee for multiple use of a single parcel of land. This type of easement is typically employed for where utility lines and trails will occupy the same corridor.

⁵⁷Ibid., 108

3. Purchase

Outright purchase or donation of requisite properties is probably the most common and understood method for acquiring land for greenways and is accomplished via the following:

- Fee simple acquisition-the purchaser acquires full rights and title to a parcel of land without restriction or reservation. If a condition is applied to the purchase (such as limiting use to farming), the fee simple is considered "determinable" and the property reverts to the grantor if that condition is not met.
- Acquisition via donation or gift-a landowner gives the property to an individual, agency or organization. The donation typically earns the landowner property tax credits or estate or income tax deductions.
- Purchase and lease back-an organization or agency buys a piece of land then leases it back to the seller for a specified period of time.
- Bargain sale-a landowner chooses to sell land at less than its fair market value and to treat the difference in value as a charitable contribution for which he or she earns a tax deduction.
- Option or right of first refusal-an agreement is reached with a property owner to have the first chance to purchase a piece of property, if and when the owner decides to sell.
- Purchase of development rights-the property owner retains all ownership rights under current use, but exchanges rights to future development for an up-front cash payment.
- Condemnation-a method for acquiring property for a public project when complications associated with the deed make the transaction difficult. This method is, of course, the least desirable for greenway implementation.

Construction Documents

Permits

Greenway implementation will include local jurisdictional review and application for permits. As the detailed design is completed, the architects and engineers will identify state and federal environmental permits required for that particular segment. However, it is the contractor's responsibility to comply with all city, county and state building laws and ordinances relating to construction of sidewalks, streets, signs, blasting, grading and other typical construction components. The contractor will be required to obtain and pay for all construction-related permits. The project landscape architects and engineers will assist the owner with applications for environmental permits.

At the conceptual or master plan level of design, it is not possible to identify all requisite permits. Research and analysis associated with detailed design development and the environmental assessment process will identify situations that require environmental permits. However, environmental permits are usually required when greenways or trails are aligned in stream corridors, or when they may impact wetlands. Environmental permits required by the State of Tennessee prior to greenway construction consist of a Notice of Intent and an Aquatic Resources Alteration Permit. The U.S. Army Corps of Engineers require a Section 404 Permit.

The State of Tennessee's Department of Environment and Conservation (TDEC) requires the Aquatic Resource Alteration Permit (ARAP)/Section 401 Certification when trails or related amenities will physically alter waters (streams and wetlands) of the state, including water withdrawals that have the potential to affect the stream's ability to support classified uses. ARAPs are required for any alteration of state waters, including wetlands. Potential trail-related stream alteration activities requiring an ARAP from Tennessee's Division of Water Pollution Control (WPC) include:

- Dredging, widening, straightening a channel.
- Channel relocation.
- Flooding, excavating, draining and/or filling wetlands.
- Bridge construction.

Not every potential greenway activity requires a separate, individual permit. The Division of WPC issues general permits for specific stream alterations that cause minimal impact to water quality. The following activities currently are eligible for a general permit (if the activity does not fall under the conditions of the general permit, an individual ARAP will be required):

- Boat launching ramps.
- Alteration of wet weather conveyances.
- Road crossings of waters.
- Utility line crossings.
- Bank stabilization.
- Sand and gravel dredging.
- Debris removal from streams and rivers.
- Bridge scour repair.
- Application of herbicides in aquatic systems.
- Stream restoration and habitat enhancement.
- Alteration of up to one acre of isolated wetlands.

Up to 90 days should be expected for the state to process an individual permit-up to 30 days are required to process a general permit. The ARAP application submitted to the Division of WPC requires that the applicant provide a cover letter describing the purpose of the proposed project, as well as a topographic map indicating the project's exact location. The applicant must also submit copies of detailed plans that include a description of existing stream characteristics and dimensions, description of proposed channel modifications (if any),

amount and location of excavation and dredging (if any), limits of clearing and grading, methods of excavation and an erosion control plan.

Nationwide Permits

Nationwide Permits (NWPs) are a type of general permit issued by the Chief of Engineers (U.S. Army Corps of Engineers) and are designed to regulate with little if any delay or paperwork certain activities having minimal impacts. However, if the project in any way affects a watercourse, its 100-year floodplain or any lake, pond, reservoir, swamp, marsh or wetland, the project applicant must secure a Section 404 permit from the U.S. Army Corps of Engineers. In Middle Tennessee contact:

Mr. Randy Castleman
U.S. Army Corps of Engineers
Regulatory Branch
PO Box 1070
Nashville, TN 37202